ANALYTICAL DATABASE SYSTEM THAT MODELS DATA
TO SPEED UP AND SIMPLIFY DATA ANALYSIS

ABSTRACT OF THE DISCLOSURE

An analytical database system provides access to all of the data collected by an entity in interactive time. The analytical database system transforms relational database data. The relational database is denormalized and inverted such that the data fields of tables in the relational database are stored in separate files that contain a row number field and a single data field. At least one of the files, that contains repeating data values that are stored in successive rows, is compressed. The files include files with partition values and files with analytical data. Processing of the files is distributed by creating sub-rowsets of the files and by assigning the sub-rowsets to servers. The partial result sets are merged into a complete result set.